UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,791	08/25/2006	Jorg Heuer	32860-001087/US	1335

30596 7590 11/12/2009

HARNESS, DICKEY & PIERCE, P.L.C.
P.O.BOX 8910
RESTON, VA 20195

EXAMINER	
TRAN, QUOC A	

ART UNIT	PAPER NUMBER
2176	

MAIL DATE	DELIVERY MODE
11/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,791	HEUER ET AL.	
	Examiner	Art Unit	
	Quoc A. Tran	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23 and 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 September 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/590,791.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is Non-Final Office Action in response to the Rce/Amendments/Remarks filed 09/02/2009. The current patent application originally filed 08/25/2006, which claims priority to National Stage entry of PCT/EP05/50264 with foreign priority to No. 10 2004 009 617.1 dated ***02/27/2004*** (Siemens).

- Claims 1-23 and 25-27 are pending.
- Claim 1 is independent claim.
- Claim 24 is canceled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/02/2009 has been entered.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed Cir 1993). *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969);

Claim(s) claims 1-23 and 25-27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent 7,607,080, which was issued on 10/20/2009. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both exhibiting similar method for coding and encoding a structure document uses the inheriting relationship of its namespace/schema.

Claims 1-23 and 25-27, of current application and U.S. Patent 7,607,080, are compared as follows, showing the obviousness of the teachings of the patent to the claimed invention:

Current Application	**US Patent 7,607,080**
Claims 1-23 and 25-27:	**Claims 1-10:**
A method for coding a structured, document, comprising: [claim 1]	A method for coding a structured document, comprising: [see claim 1]
generating a plurality of codes using at least one name space and	generating a plurality of codes with an encoder processor using a plurality of

allocating the plurality of codes for data types defined by the at least one name space; [see claim 1]	namespaces comprising data types; defining elements in one or more namespaces, and representing the elements in a schema data structure; [see claim 1]
assigning the at least one name space to another name space, such that at least one assignment information is generated, the assignment information including at least one inheritance relationship between the bequeathing namespace and the inheriting namespace, wherein the assignment information of the inheriting namespace includes at least one code of a basic data type of the bequeathing namespace for a header type of the inheriting namespace, [see claim 1]	assigning independent codes for at least one namespace having defined elements, wherein the independent codes are generated from other namespaces, and wherein the independent codes within a given namespace are assigned by the encoder processor for data types by: sorting data types of a namespace, which have been inherited from data types of other namespaces, in a list according to an ordering of basic data types, wherein the basic data types comprise data types from inherited namespaces, [see claim 1]
the basic data type of the bequeathing namespace being a data type from which the header type of the inheriting namespace originates directly **OR** the basic data type of the bequeathing name space being a basic data type of a yet another bequeathing name space in an inheritance hierarchy, the inheritance hierarchy including the yet another bequeathing name space, the bequeathing~ name space and the inheriting name space. [see claim 1]	a given namespace are assigned by the encoder processor for data types by: sorting data types of a namespace, which have been inherited from data types of other namespaces, in a list according to an ordering of basic data types, wherein the basic data types comprise data types from inherited namespaces, sorting lexicographically data types inherited from a specified basic data type of a specified namespace of the plurality of namespaces, sorting the data types of a namespace which have not been inherited from a data type of another namespace into the ordering of basic data types, and assigning the independent codes in the order of the ordering of the basic data types of the namespace; and at the encoder processor, outputting a binary representation of the structured document based on the plurality of codes and the

	independent codes. [See claim 1]
Claims 2-23 and 25-27	Claims 1-10

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-23 and 27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21-23 and 27:

In summary, Claims 21-23 and 27 recite a "*coding and decoding device*." The recited "*coding device*" and "*decoding device*" for coding and decoding XML-based document such MPEG-7 utilizing instances of schemas/namespaces are illustrated at Figure 1, and the Specification expressly states, "*a coding device and a decoding device to implement the inventive coding and/or decoding method. An example embodiment of the invention also includes a coding and decoding device, with which an embodiment of the inventive coding method and an embodiment of the inventive decoding method can be implemented*" see Specification → Page 11, Paragraph [0039]. The Examiner interprets **coding device** and **decoding device** described herein **may**

be performed in either **hardware** or **software**, since it is not clearly define the separation of either hardware or software**.** Thus, for purposes of examination, the examiner interprets the recited "*coding device*" and "*decoding device*" for coding and decoding XML-based document such MPEG-7 utilizing instances of schemas/namespaces to comprise only computer software. Accordingly, the "*coding device*" and "*decoding device*"" recited in Claim(s) 21-23 and 27 is software *per se*.

Computer software is not a process, a machine, a manufacture or a composition of matter, as set forth in 35 U.S.C. 101. Accordingly, the claims do not recite statutory subject matter.

In the interest of compact prosecution, the application is further examined against the prior art, as stated below, upon the assumption that the applicants may overcome the above stated rejections under 35 U.S.C. 101.

Applicant may obviate the rejection by cancelling the claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21-23 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21-23 and 27:

Claim 21 recites a "*coding device*" that is "*configured to implement*" the method of Claim 1. Firstly, Claim 21 fails to recite a single component of the "*coding device*." Instead, Claim 21 simply states what the "*coding device*" does. Secondly, the Specification of the present invention fails to describe how the "*coding device*" is "*configured to implement*" the method of Claim 1. Accordingly, the scope of Claim 21 cannot be determined.

Moreover, the examiner notes that, although Applicant expressly indicates that the "*coding device*" is "directed to hardware" (see *Remarks* dated 09/02/2009 → Page 10, first full paragraph), **none** of the claims recite a hardware component and the Specification **fails** to describe a hardware component.

Applicant must either amend the claim to particularly point out and distinctly claim the subject matter which Applicant regards as the invention or cancel the claim.

Claims 22, 23 and 27 have the same problem.

Allowable Subject Matter

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and/or filing Terminal Disclaimer to overcome the obviousness-type double patenting rejection set forth in this Office action.

Claims Rejection – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11, 13-23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Seyrat et al.,** (US 20040068696A1 filed 02/04/2002) [hereinafter "Seyrat"], in view of **Rising et al.,** US 20020138514A1 filed 10/222/2001) [hereinafter "Rising"].

Regarding ***independent claim 1***, Seyrat teaches:

A method for coding a structured, document, comprising:

(Fig(s) 1 and 2-2a and @ Para [10]→ Seyrat teaches this limitation, as clearly indicated in the cited text [e.g., MPEG-7 (Moving Picture Expert Group) proposes a method and a binary format for encoding (compressing/coding) the description of a structured document and decoding such a binary format.])

assigning the at least one name space to another name space, such that at least one assignment information is generated, the assignment information including at least one inheritance relationship between the bequeathing namespace and the inheriting namespace,

(See Fig(s) 1 and 2-2a and Page 4 Paragraph [0090]→ Page 5 Paragraph [0095], Seyrat discloses the XML binary syntax code is allocated (assigning) based upon the inheritance relationship between inheriting schema and the schema realization of flattening the type inheritances and in solving the namespace supported.

Also Seyrat further disclose the compilation process of schemas relies on a prior schema analysis phase and aims at generating finite state automata 12 defined in the form of a binary syntax code. Each complex type defined in the processed schema is transformed into a finite state automaton expressing the complex type coding rules (bequeathing) [See Seyrat @ Para [0091].

Moreover Seyrat further teaches the derived information element is associated in the first schema to a structure type which is extended with respect to the structure type of the corresponding information element in the second schema [See Seyrat @ Para [0019-0025].)

Therefore, as broadly disclosed in the instant specification @ Page 2 Para [0007] the last sentence "*the term "name space" is hereafter used as a synonym for the term "Schema"*); the examiner concludes, reasonably, that the claimed "bequeathing namespace and the inheriting namespace" described by Seyrat.

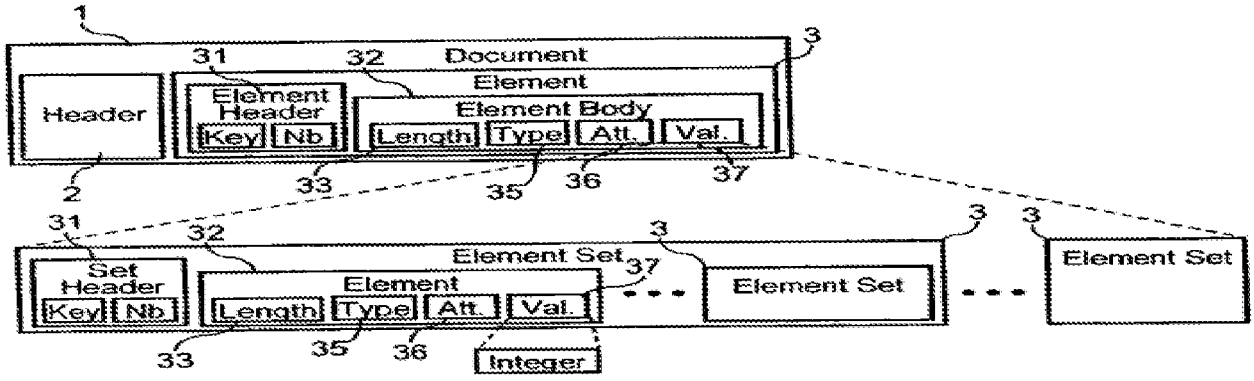

Fig. 1

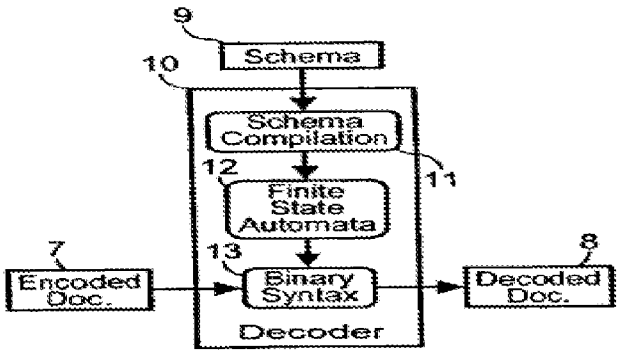

Fig. 2

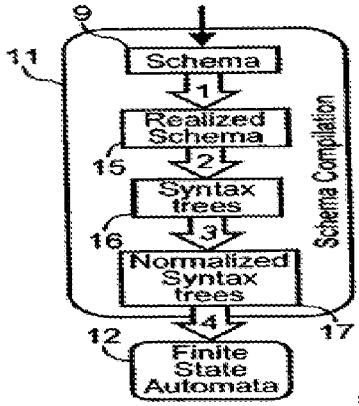

Fig. 2a

wherein the assignment information of the inheriting namespace includes at least one code of a basic data type of the bequeathing namespace for a header type of the inheriting namespace, the basic data type of the bequeathing namespace being a data type from which the header type of the inheriting namespace originates directly OR the basic data type of the bequeathing name space being a basic data type of a yet another bequeathing name space in an inheritance hierarchy, the inheritance hierarchy including the yet another bequeathing name space, the bequeathing name space and the inheriting name space.

(See Fig(s) 1 and 2-2a and Page 4 Paragraph [0090]→ Page 5 Paragraph [0095], Seyrat discloses the XML binary syntax code is allocated (assigning) based upon the inheritance relationship between inheriting schema and the schema realization of flattening the type inheritances and in solving the namespace supported.

Also Seyrat further disclose the compilation process of schemas relies on a prior schema analysis phase and aims at generating finite state automata 12 defined in the form of a binary syntax code. Each complex type defined in the processed schema is transformed into a finite state automaton expressing the complex type coding rules (bequeathing) [See Seyrat @ Para [0091]. See also figure 1 and Para [0033], Seyrat illustrates the header type of the inheriting namespace.)

Therefore, as broadly disclosed in the instant specification @ Page 2 Para [0007] the last sentence "*the term "name space" is hereafter used as a synonym for the term 'Schema*); the examiner concludes, reasonably, that the claimed "bequeathing namespace and the inheriting namespace" described by Seyrat.

In addition, Seyrat does not expressly teach, but Rising teaches:

A method for coding a structured, document, comprising: generating a plurality of codes using at least one namespace; and allocating the plurality of codes for data types defined by the at least one name space;

(Fig 1 and @ Para [0009]→ Rising teaches this limitation, as clearly indicated in the cited text [e.g., methodology encodes an instance document describing multimedia content by determining a context node in the content description and using a schema (a

namespace) associated with the context node to determine the maximum number of children attributes and elements of the context node (allocating the plurality of codes). Also Rising further discloses each optional attribute and element is further assigned a unique fixed-length identifier that associates it with its definition in the schema (namespace) [See Rising @ Para [0043]].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said generating a plurality of codes using at least one namespace; and allocating the plurality of codes for data types defined by the at least one name space as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 2,

Seyrat and Rising teach the method of claim 1 and further comprise:

wherein a subset comprising addressable data types of the inheriting name space is determined based on an initial basic type of the bequeathing name space and on the basis of the inheritance relationship between the bequeathing and inheriting name spaces.

(See Paragraph [0090]→ Page 5 Paragraph [0095], Seyrat discloses the XML binary syntax code is allocated (addressable) based upon the inheritance relationship between inheriting schema and the schema realization of flattening the type inheritances and in solving the namespace supported.

Also Seyrat further disclose the compilation process of schemas relies on a prior schema analysis phase and aims at generating finite state automata defined in the form of a binary syntax code. Each complex type defined in the processed schema is transformed into a finite state automaton expressing the complex type coding rules (bequeathing) [See Seyrat @ Para [0091]. See also figure 1 and Para [0033], Seyrat illustrates the header type of the inheriting namespace (data type).)

Claim 3,

Seyrat and Rising teach the method of claim 2 and further comprise:

wherein the addressable subset is determined based on the initial basic type by establishing the basic types of the bequeathing name space.

(See Paragraph [0090]→ Page 5 Paragraph [0095], Seyrat discloses the XML binary syntax code is allocated (addressable) based upon the inheritance relationship between inheriting schema and the schema realization of flattening the type inheritances and in solving the namespace supported.

Also Seyrat further disclose the compilation process of schemas relies on a prior schema analysis phase and aims at generating finite state automata defined in the form of a binary syntax code. Each complex type defined in the processed schema is transformed into a finite state automaton expressing the complex type coding rules (bequeathing) [See Seyrat @ Para [0091]. See also figure 1 and Para [0033], Seyrat illustrates the header type of the inheriting namespace (data type).)

Claim 4,

Seyrat and Rising teach the method of claim 3 and further comprise:

wherein, based on the initial basic type of the bequeathing name space, the header type is determined in the inheriting name space and the basic type of the inheriting name space is identified from the bequeathing name space using the assignment information, the initial basic type of the inheriting name space being a basic type of the bequeathing name space.

(See Fig(s) 1 and 2-2a and Page 4 Paragraph [0090]→ Page 5 Paragraph [0095], Seyrat discloses the XML binary syntax code is allocated based upon the inheritance

relationship between inheriting schema (namespace) and the schema (namespace) realization of flattening the type inheritances and in solving the namespace supported.

Also Seyrat further disclose the compilation process of schemas relies on a prior schema analysis phase and aims at generating finite state automata 12 defined in the form of a binary syntax code. Each complex type defined in the processed schema (namespace) is transformed into a finite state automaton expressing the complex type coding rules (bequeathing) [See Seyrat @ Para [0091]. See also figure 1 and Para [0033], Seyrat illustrates the header type of the inheriting namespace.)

Therefore, as broadly disclosed in the instant specification @ Page 2 Para [0007] the last sentence "*the term "name space" is hereafter used as a synonym for the term "Schema"*); the examiner concludes, reasonably, that the claimed "bequeathing namespace and the inheriting namespace" described by Seyrat.

Claim 5,

Seyrat and Rising teach the method of claim 1 and further comprise:

wherein the assignment information assigned to the inheriting name spaces is stored together with the respective name space in a first device carrying out at least one of the coding and a decoding operation.

(Rising further discloses each optional attribute and element is further assigned a unique fixed-length identifier that associates it with its definition in the schema (namespace) [See Rising @ Para [0043]]; also Rising further discloses the assigned

identifier that associates it with its definition in the schema (namespace) is stored for all the occurrences of encoding and/or decoding [See Rising @ Para [0068-0069].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said the assignment information assigned to the inheriting name spaces is stored together with the respective name space in a first device carrying out at least one of the coding and a decoding operation as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 6,

Seyrat and Rising teach the method of claim 5 and further comprise:

wherein the assignment information assigned to the inheriting name spaces is generated in a second device and transmitted together with the respective name space to the first device carrying out at least one of the coding and decoding.

(See Paragraph 33-34→ Seyrat discloses the schema reference list comprising references to all schemas used for encoding the structured document is inserted in a header associated to the binary stream encoding the structured document, wherein basic types are identified from the committed name space by use of the assignment information. Also Seyrat further discloses MPEG-7 (item 10 of Fig. 2) comprises a schema compilator (item 11 of Fig. 2) designed to receive and process schemas (item 9 of Fig. 2) such as XML schemas [i.e., namespace- see the applicant 's disclosure at Page 2 Paragraph [0007]], in order to obtain a binary syntax code (item 13) [i.e., coding] that is executed to decode encoded documents 7 [i.e., coding a structure] that are applied in input of the decoder 10, the latter providing in output decoded documents 8 in format XML for example.[Fig. 2 and Page 4 Paragraph 90→ Page 5 Paragraph 85].

This allows computer networks, which is the main media for communications. Computers can now be plugged to a shared network, operating systems allow applications to easily exchange messages, Internet infrastructure allows computers to find their interlocutor, applications use complex algorithms to synchronize themselves [i.e., device to device]. This is generally described at [0004].)

Claim 7,

Seyrat and Rising teach the method of claim 1 and further comprise:

wherein respectively separate codes, independent of other schemas OR name spaces and for elements either defined OR declared in the schemas, name spaces OR in groups of schemas OR name spaces, are allocated for another schema, a name space OR for another group of schemas and name spaces.

(Fig(s) 1, 2B, 6 and @ Para [0009]→ Rising teaches this limitation, as clearly indicated in the cited text [e.g., methodology encodes an instance document describing multimedia content by determining a context node in the content description and using a schema (a namespace) associated with the context node to determine the maximum number of children attributes and elements of the context node (allocating the plurality of codes). Also Rising further discloses each optional attribute and element is further assigned a unique fixed-length identifier that associates it with its definition in the schema (namespace) [See Rising @ Para [0043]].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said the

respectively separate codes, independent of other schemas OR name spaces and for elements either defined OR declared in the schemas, name spaces OR in groups of schemas OR name spaces, are allocated for another schema, a name space OR for another group of schemas and name spaces as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 8,

Seyrat and Rising teach the method of claim 7 and further comprise:

wherein, to identify the at least one of schema name space and the group of at least one of schemas and name spaces, the respectively separate codes are sub-divided into corresponding address areas.

(Fig(s) 1, 2B and 6 and @ Para [0009]→ Rising teaches this limitation, as clearly indicated in the cited text [e.g., methodology encodes an instance document describing multimedia content by determining a context node in the content description and using a schema (a namespace) associated with the context node to determine the maximum number of children attributes and elements of the context node (allocating the plurality

of codes). Also Rising further discloses each optional attribute and element is further assigned a unique fixed-length identifier that associates it with its definition in the schema (namespace) [See Rising @ Para [0043]].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said identify the at least one of schema name space and the group of at least one of schemas and name spaces, the respectively separate codes are sub-divided into corresponding address areas as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 9,

Seyrat and Rising teach the method of claim 7 and further comprise:

wherein the separate codes respectively comprise a local code at least one of relating to at least one of the schema and the name space and relating to at least one of the group of schemas and name spaces and an identification code to identify at least one of the schema, and name space and the group of at least one of schemas and name spaces.

(Fig(s) 1, 2B and 6 and @ Para [0009]→ Rising teaches this limitation, as clearly indicated in the cited text [e.g., methodology encodes an instance document describing multimedia content by determining a context node in the content description and using a schema (a namespace) associated with the context node to determine the maximum number of children attributes and elements of the context node. Also Rising further discloses each optional attribute and element is further assigned a unique fixed-length identifier that associates it with its definition in the schema (namespace) (separate codes respectively comprise a local code at least one of relating to at least one of the schema) [See Rising @ Para [0043]].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said the separate codes respectively comprise a local code at least one of relating to at least one of the schema and the name space and relating to at least one of the group of schemas and name spaces and an identification code to identify at least one of the schema, and name space and the group of at least one of schemas and name spaces as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 10,

Seyrat and Rising teach the method of claim 7 and further comprise:

wherein the separate codes are generated for at least one of global elements, substitution groups and data types.

(Also Rising further discloses each optional attribute and element is further assigned a unique fixed-length identifier that associates it with its definition in the schema (namespace- separate codes respectively comprise a local code at least one of relating to at least one of the schema) [See Rising @ Para [0043]].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said the separate codes are generated for at least one of global elements, substitution groups and data types as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 11,

Seyrat and Mory teach the method of claim 10 and further comprise:

wherein separate codes are generated for data types type codes such that within the inheritance tree of a name space the data type adjacent to a first data type in the same name space is at a code interval with respect to the first data type, said code interval

corresponding to the number of data types derived from the first data type in this name space.

(Fig 2B, 6 and @ Para [0029-0043]→ Rising teaches codes are generated for label values such as [Scenes-data types] within the inheritance tree of a schema definition [see Fig 6]. name space and the data type adjacent to a first data type in the same name space is at a code interval with respect to the first data type, said code interval corresponding to the number of data types derived from the first data type in this name space as illustrated in Fig 2B item 250.

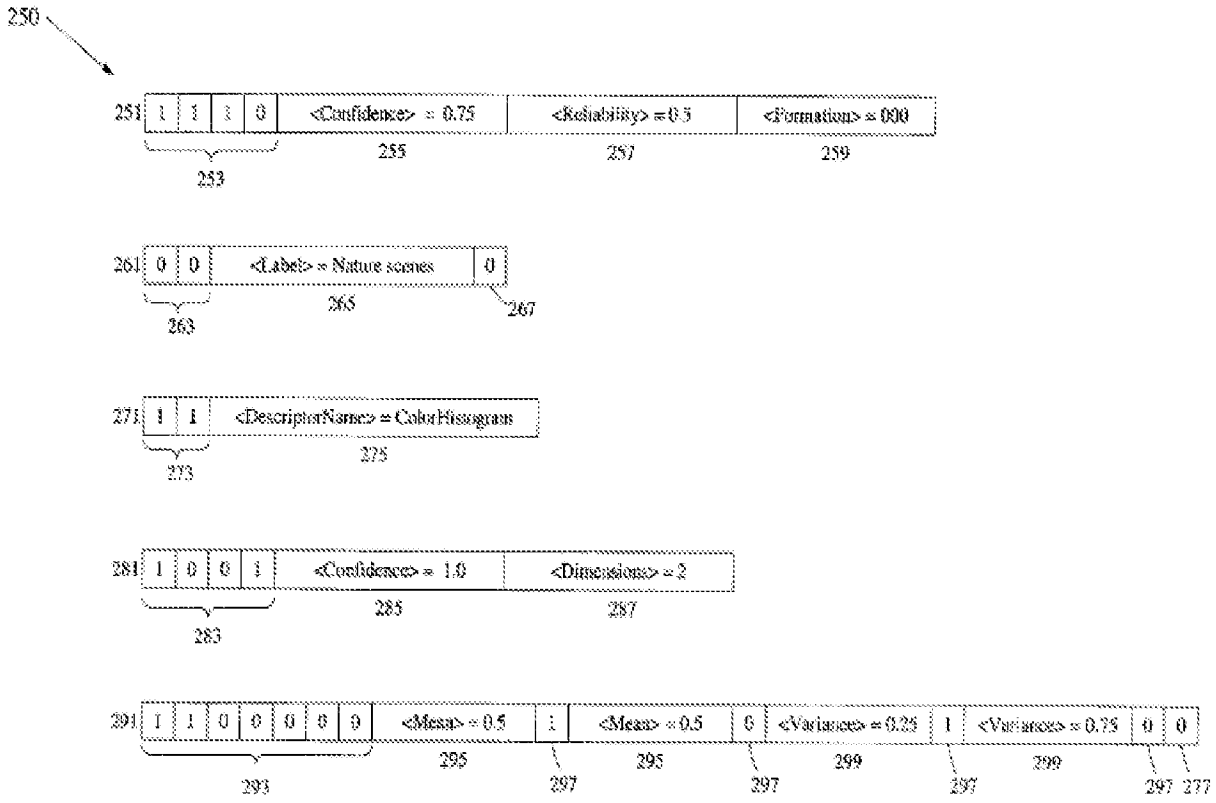

Figure 2B

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said the separate codes are generated for data types type codes such that within the inheritance tree of a name space the data type adjacent to a first data type in the same name space is at a code interval with respect to the first data type, said code interval corresponding to the number of data types derived from the first data type in this name space as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 13,

Claim 13 is fully incorporated similar subject of claim 1 cited above, and are similarly rejected along the same rationale. Thus, Seyrat and Rising disclose

every limitation of Claim 13 and provide proper reasons to combine, as indicated in the above rejections for Claim 1.

In addition Seyrat teaches:

Seyrat and Mory teach the method of claim 1 and further comprise:

decoding a document previously coded according to a method as claimed in claim 1,

(At the Abstract→ Seyrat discloses an encoding method for enabling a decoder to decode a structured document having a structure defined in a first schema not accessible to the decoder and resulting from a change of a second schema accessible to the decoder.)

Claim 14,

Seyrat and Rising teach the method of claim 11 and further comprise:

wherein, to decode a binary type code, the code length of the separate codes of the binary type codes is determined from the number of derived data types.

(At the Abstract→ Seyrat discloses an encoding method for enabling a decoder to decode a structured document having a structure defined in a first schema not accessible to the decoder and resulting from a change of a second schema accessible to the decoder.

See also Seyrat at Paragraph 17-18, discloses the binary sequence encoding each element of the document comprises a content field containing an encoded value of

the element and a length field placed before the content field and containing an encoded value of a length of the content field, wherein the derived information element is associated in the first schema to a structure type which is restricted with respect to the structure type of the corresponding information element in the second schema, the binary sequence encoding the derived element comprising a content field and appended to the content field, a reference to the first schema and a reference to the structure type of the derived element, defined in the second schema.)

Claim 15,

Seyrat and Rising teach the method of claim 4 and further comprise:

wherein, to decode a specific type code, a sub-tree of the inheritance tree of the name space, in which the specific type code is located, is determined from the code intervals between adjacent data types.

(Fig 2B, 6 and @ Para [0029-0043]→ Rising teaches codes are generated for label values such as [Scenes-data types] within the inheritance tree of a schema definition [see Fig 6]. name space and the data type adjacent to a first data type in the same name space is at a code interval with respect to the first data type, said code interval corresponding to the number of data types derived from the first data type in this name space as illustrated in Fig 2B item 250. Also Rising further teaches identifiers for the optional attributes or optional elements are also encoded and a count of the optional attributes or optional elements is used in place of the mask. A corresponding decode

methodology extracts the values of the attributes and elements from the encoded instance document to re-create the content description [See the Abstract of Rising].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said to decode a specific type code, a sub-tree of the inheritance tree of the name space, in which the specific type code is located, is determined from the code intervals between adjacent data types as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 16,

Claim 16 is fully incorporated similar subject of claim 1 cited above, and are similarly rejected along the same rationale. Thus, Seyrat and Rising disclose

every limitation of Claim 16 and provide proper reasons to combine, as indicated in the above rejections for Claim 1.

In addition Seyrat teaches:

Decoding an XML-based document,

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in general to the field of computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language).)

Claim 17,

Claim 17 is fully incorporated similar subject of claim 11 cited above, and are similarly rejected along the same rationale. Thus, Seyrat and Rising disclose every limitation of Claim 17 and provide proper reasons to combine, as indicated in the above rejections for Claim 11.

In addition Seyrat teaches:

a method for decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in general to the field of computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language).

wherein, to decode a binary type code, the code length of the separate codes of the binary type codes is determined from the number of derived data types,

(At Paragraph 17-18, discloses the binary sequence encoding each element of the document comprises a content field containing an encoded value of the element and a length field placed before the content field and containing an encoded value of a length of the content field, wherein the derived information element is associated in the first schema to a structure type which is restricted with respect to the structure type of the corresponding information element in the second schema, the binary sequence encoding the derived element comprising a content field and appended to the content field, a reference to the first schema and a reference to the structure type of the derived element, defined in the second schema.)

Claim 18,

Claim 18 is fully incorporated similar subject of claim 11 cited above, and are similarly rejected along the same rationale. Thus, Seyrat and Rising disclose every limitation of Claim 18 and provide proper reasons to combine, as indicated in the above rejections for Claim 11.

In addition Seyrat teaches:

a method for decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language).

wherein, to decode a specific type code, a sub-tree of the inheritance tree of the name space, in which the specific type code is located, code length is determined from the code intervals between adjacent data types.

(Fig 2B, 6 and @ Para [0029-0043]→ Rising teaches codes are generated for label values such as [Scenes-data types- a specific type code] within the inheritance tree of a schema definition [see Fig 6]. name space and the data type adjacent to a first data type in the same name space is at a code interval with respect to the first data type, said code interval corresponding to the number of data types derived from the first data type in this name space as illustrated in Fig 2B item 250. Also Rising further teaches identifiers for the optional attributes or optional elements are also encoded and a count of the optional attributes or optional elements is used in place of the mask. A corresponding decodes methodology extracts the values of the attributes and elements from the encoded instance document to re-create the content description [See the Abstract of Rising].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said to decode a specific type code, a sub-tree of the inheritance tree of the name space, in which the specific type code is located, code length is determined from the code intervals between adjacent data types as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 19,

Claim 19 is fully incorporated similar subject of claim 11 cited above, and are similarly rejected along the same rationale. Thus, Seyrat and rising disclose every limitation of Claim 19 and provide proper reasons to combine, as indicated in the above rejections for Claim 11.

In addition Seyrat teaches:

a method for decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language).

wherein, to determine the basic types originate from initial basic type, code length is determined from the code intervals between adjacent data types.

(Fig 2B, 6 and @ Para [0029-0043]→ Rising teaches codes are generated for label values such as [Scenes-data types- a specific type code] within the inheritance tree of a schema definition [see Fig 6]. name space and the data type adjacent to a first data type in the same name space is at a code interval with respect to the first data type, said code interval corresponding to the number of data types derived from the first data type in this name space as illustrated in Fig 2B item 250. Also Rising further teaches identifiers for the optional attributes or optional elements are also encoded and a count of the optional attributes or optional elements is used in place of the mask. A corresponding decodes methodology extracts the values of the attributes and elements from the encoded instance document to re-create the content description (originate from initial basic type) [See the Abstract of Rising].)

The Examiner notes the instant specification @ Page 2 Para [0007] the last sentence states "*the term "name space" is hereafter used as a synonym for the term "Schema"*). Thus Rising's schema is equivalent to "name space" as claimed.

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said, to determine the basic types originate from initial basic type, code length is determined from the code intervals between adjacent data types as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 20,

Claim 20 is fully incorporated similar subject of claim 11 cited above, and are similarly rejected along the same rationale. Thus, Seyrat and Rising disclose every limitation of Claim 20 and provide proper reasons to combine, as indicated in the above rejections for Claim 11.

In addition Seyrat teaches:

a method for decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in general to the field of computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that

conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language).

wherein, to determine the number of types in the subset, code length is determined based on the header types from the code intervals between adjacent header types.

(Fig 1 and @ Para [0009]→ Rising teaches a methodology encoding an instance document describing multimedia content by determining a context node in the content description and using a schema (a namespace) associated with the context node to determine the maximum number of children attributes and elements of the context node (allocating the plurality of types in a subset). Also Rising further discloses each optional attribute and element is further assigned a unique fixed-length identifier that associates it with its definition in the schema (namespace) [See Rising @ Para [0043]].

See Also Fig 2B, 6 and @ Para [0029-0043]→ Rising teaches codes are generated for label values such as [Scenes-data types] within the inheritance tree of a schema definition [see Fig 6] name space and the data type adjacent to a first data type in the same name space corresponding to the number of data types derived from the first data type in this name space as illustrated in Fig 2B item 250.)

Accordingly, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Seyrat's method for encoding the XNL document such as MPEG-7 instances based upon XML schema, to includes a means of said, to determine

the number of types in the subset, code length is determined based on the header types from the code intervals between adjacent header types as taught by Rising, because Seyrat and Rising are both form the analogous art of encoding and decoding of XML documents such as MPEG-7 instances based upon XML schema; to produce predictable result of said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly designed to deal with highly structured data, such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 21,

Claim 21 recites a coding device configured to perform the method of claim 1. Thus, Seyrat and Rising disclose every limitation of Claim 21 and provide proper reasons to combine, as indicated in the above rejections for Claim 1-Also see Seyrat at [0002], discloses a computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language). Such documents may contain multimedia information. Also Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of a structured document according to MPEG-7 standard and a MPEG-7 decoder and encoder.)

Claim 22,

Claim 22 recites a coding device configured to perform the method of claim 13. Thus, Seyrat and Rising disclose every limitation of Claim 22 and provide proper reasons to combine, as indicated in the above rejections for Claim 13-Also see Seyrat at [0002], discloses a computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language). Such documents may contain multimedia information. Also Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of a structured document according to MPEG-7 standard and a MPEG-7 decoder and encoder.)

Claim 23,

Claim 23 recites a coding and decoding device configured to perform the method of claim 21. Thus, Seyrat and Rising disclose every limitation of Claim 23 and provide proper reasons to combine, as indicated in the above rejections for Claim 21-Also see Seyrat at [0002], discloses a computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language). Such documents may contain multimedia information. Also

Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of a structured document according to MPEG-7 standard and a MPEG-7 decoder and encoder.)

Claims 25-26, Seyrat teaches:

a method for coding and decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in general to the field of computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language).

Claim 27,

Claim 27 recites a coding and decoding device configured to perform the method of claim 22. Thus, Seyrat and Rising disclose every limitation of Claim 27 and provide proper reasons to combine, as indicated in the above rejections for Claim 22-Also see Seyrat at [0002], discloses a computer systems, and more particularly to a method and system for the compression of structured documents using document descriptions that conforms to a generalized markup language, such as SGML (Standard Generalized Markup Language) and XML (Extensible Markup Language). Such documents may contain multimedia information. Also

Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of a structured document according to MPEG-7 standard and a MPEG-7 decoder and encoder.)

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

Response to Arguments

Applicant's arguments filed with current paper have been considered but are moot in view of the new ground(s) of rejections as cited above.

This is a NonFinal office action in order to provide applicant the opportunity to response to the new grounds of rejection, which is set forth above.

Response to Remarks:

Beginning on page 9/11 of the Remarks (hereinafter the remarks), Applicant argues the following issues, which are accordingly addressed below.

Regarding claims Double Patent Rejection:

As stated in the remarks at page 9, the "Double Patent Rejection", "*Applicants acknowledge this provisional rejection, and will take the appropriate steps to address this rejection once the claims in this application and the claims in pending Application 10/564,601 are indicated as including allowable subject matter since this provisional rejection is based on claims that may change. Furthermore, amendments to independent claim 1 overcome the double patent rejection*".

The Examiner acknowledges Applicant's remarks and maintains the Double Patenting Rejections.

Regarding 101 rejections of claims 21-23 and 25-27:

Applicants asserts that "*as per the plain ordinary dictionary meaning of "device," the "coding device," "decoding device" and "coding/decoding device" as recited in the claims is directed to hardware. As such, claims 21-23 and 27 are directed to statutory subject matter*." See the remarks at page 10, second paragraphs .

The Examiner disagrees.

As discuss above and in previously presented Office Action mailed 06/02/2009 and 09/04/2008. As recognized by the Examiner, claims 21-23 and 27 recite a "*method*" comprising a "*coding and decoding device*". The recited "*coding device*" and "*decoding device*" for coding and decoding XML-based document such MPEG-7 utilizing instances of schemas/namespaces are illustrated at Figure 1, and the Specification expressly states, "*a coding device and a decoding device to implement the inventive coding*

and/or decoding method. An example embodiment of the invention also includes a coding and decoding device, with which an embodiment of the inventive coding method and an embodiment of the inventive decoding method can be implemented" see Specification → Page 11, Paragraph [0039].

The Examiner interprets **coding device** and **decoding device** described herein **may be performed in** either **hardware** or **software**, since it is not clearly define the separation of either hardware or software**.** Thus, for purposes of examination, the examiner interprets the recited "*coding device*" and "*decoding device*" for coding and decoding XML-based document such MPEG-7 utilizing instances of schemas/namespaces to comprise only computer software. Accordingly, the "*coding device*" and "*decoding device*"" recited in Claim(s) 21-23 and 27 is **software *per se***.

Computer software is not a process, a machine, a manufacture or a composition of matter, as set forth in 35 U.S.C. 101. Accordingly, the claims do not recite statutory subject matter.

Applicant may obviate the rejection by cancelling the claims.

Regarding rejections under 35 U.S.C. § 103:

The Examiner introduce the new ground of rejection [Seyrat in view of Rising]; new reference Rising is introduced to address some of the amended features [see the above rejection for details]. In addition, the Examiner maintains the Seyrat reference; since Seyrat discloses a ***MPEG-7 encoding/decoding*** method comprises a schema compilator designed to receive and process schemas such as XML schemas. To

decode/encode xml documents, each complex type defines in the processes schema is transformed into a finite state automaton expressing the complex type coding rules. The input encoded document 7 is applied to the decoder in the form of a binary stream on which the binary syntax code is executed using ***type inheritances*** and in solving the ***Namespace support***. This phase generates a realized schema. The second phase consists in ***generating a syntax tree*** from each complex type. This is generally disclosed at [Para 0090 through 0092 and Figure 2 and 2a of Seyrat]. In addition, the Examiner noted the Specification expressly states, "The term *"name space" is hereafter used as a synonym for the term "schema"*, see Page 2, Paragraph 0007, third sentence).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Hu et al. ("Multimedia Description Framework (MDF) for Content Description of Audio/Video Documents" published 1999 By ACM, Berkley, CA USA):
- Hu teaches MPEG-7 (Moving Picture Expert Group) includes a scheme for coding the description of all types if media data/document, such as text, image, audio and video. Also Hu further discloses the description scheme (DS) (*namespace) that is universally applicable to all types of media data/documents* including text documents, image files, and audio/video

streams. TEXT, IMAGE, AUDIO and VIDEO are the first-generation DS, and therefore, children of DOC. Each of them specifies descriptors that are only applicable to the specific type of document/data. Meanwhile, they inherit specification of descriptors from its higher-layer DS, i.e., DOC, and so on [See Hu @ @ Page 70- the Right-Hand-Side Column first Para and illustrated @ Fig 3 page 70] and see also Example 2 Section 2.3 page 70 of Hu.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc A. Tran whose telephone number is 571-272-8664. The examiner can normally be reached on Mon through Fri 8AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571)272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quoc A. Tran/
Examiner, Art Unit 2176

/DOUG HUTTON/
Supervisory Patent Examiner, Art Unit 2176